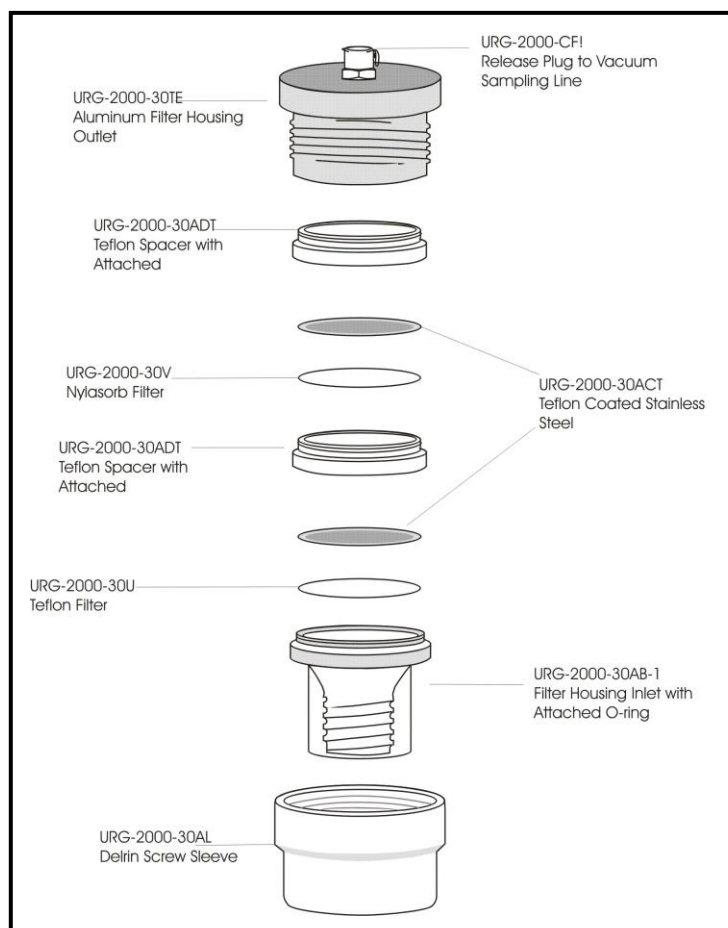


before entering the reactive section. Once the air stream leaves the reactive denuder section, fine particles ($\text{PM}_{2.5}$) are collected in the filter pack.

The filter pack consists of two filters, connected in series (see Figure 4.3). Ammonium, nitrate and sulfate are collected first by a 2- μm , TeflonTM membrane filter⁴. The second filter, 1- μm nylon filter⁵, collects any nitric acid that may result due to particulate decomposition from ammonium nitrate particles collected on the TeflonTM filter.

Figure 4.3 Filter Pack Internals



4.2 Sampling Period

Sampling for acid gases and fine particulates at the ADS Monitoring Site began on September 9, 2006 and continued until April 4, 2007. A total of 197 samples including blanks were collected over this sampling period. Sampling for acid gases and fine particulates at the Off-Axis

⁴ Whatman, North America PM_{2.5} membrane PTFE

⁵ Pall Corporation Nylasorb membrane disc filters